

Mumbai University

May - 2018

B.Sc.IT: SEMESTER – V

(QUESTION PAPER)

[IDOL – Old Course]

ELECTIVE – I

ADVANCED

JAVA

Time: 3 Hours**Total Marks:** 100**N.B.:** (1) Question No. 1 is Compulsory.

(2) Attempt any four from Question Nos. 2 to 7.

(3) Make Suitable Assumptions Wherever Necessary And State The Assumptions Made.

(4) Answer To The Same Question Must Be Written Together.

(5) Number To The Right Indicates Marks.

(6) Draw Neat Labeled Diagrams Wherever Necessary.

Q.1 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Write a short note on JLabel and JButton with an example program. (5)
- (B) Explain the steps to be followed in Java Database Connectivity for accessing a database table content. (5)
- (C) What are servlets? Explain the request/response paradigm of servlets. (5)
- (D) Write a JSP program to accept a number from the HTML form, and find its Square Root and Cube Root. (5)

Q.2 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) List and explain the layout orientation used for JList? Give suitable example. (8)
- (B) Write a short note on JTree with an example. (6)
- (C) Create a GUI program that add tabs in a window. Add three tabs tab1, tab2 and tab3 that load Panel1, Panel2 and Panel3 respectively. Panel1 consist of 2 labels, Panel2 consist of 2 textboxes and Panel3 consist of two radio buttons. (6)

Q.3 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Explain the following: (8)
- (i) Root Pane
 - (ii) Glass Pane
 - (iii) Layered Pane
 - (iv) Content Pane
- (B) Write a short note on JPanel. (6)
- (C) Explain the procedure of Creating Message, Input and Confirmation Dialogs in Swing. (6)

Q.4 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Write a short note on JDBC Architecture. (8)
- (B) Explain Connection interface along with its methods. (6)
- (C) What is mean by ResultSetMetaData interface? List down the methods of ResultSetMetaData interface. (6)

Q.5 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Write a JDBC program that inserts dynamic values into a student table by accepting the values from the user. The structure of student table is (rollno, name and marks). (8)
- (B) Define the Servlet interface. Describe the methods of Servlet Interface. (6)
- (C) Explain the life cycle of a servlet. (6)

Q.6 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Write a Servlet program to find the number is prime or not. (8)
- (B) Describe the various methods of HttpServletRequest and HttpServletResponse Interface. (6)
- (C) What is JAR files? List and explain various options used while creating a JAR file. (6)

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Q.7 ATTEMPT THE FOLLOWING QUESTIONS: (20 MARKS)

- (A) Explain the following: (8)
- (a) *JSP scriptlets*
 - (b) *JSP expressions*
 - (c) *JSP Comments*
 - (d) *JSP declarations*
- (B) Enlist the Implicit Objects of JSP. Explain any 4 of them in detail. (6)
- (C) Explain with an example how Session Management is done in JSP. (6)
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